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Amended Patent Claims

sub 64  
1.

5 A method for igniting combustible gases (1), for example from  
a flare (2) of a flare tower (3), where an ignition device  
(4) is launched in a direction toward a region of combustible  
gas (1), said ignition device (4) being propelled by means of  
a pressure medium through a guidance tube (6) to said gas  
cloud region (1), the ignition device (4) undergoing a  
10 reaction for the purpose of active ignition of the gas in  
said region, the time for its activation and reaction being  
predetermined and adapted to the particular flare and  
application, and the ignition device (4) being reacted in the  
form of a shower or cloud of sparks, where at least parts of  
15 the shower of sparks strike the gas cloud (1),

c h a r a c t e r i z e d i n that the ignition device (4)  
is activated somewhere along its path in the tube (6),  
possibly at the moment when the ignition device (4) leaves  
the tube (6) or possibly when the ignition device (4) starts  
20 its course through the tube (6).

2.

A method according to claim 1,

c h a r a c t e r i z e d i n that the ignition device (4)  
25 is positioned within a trapping device (20) prior to the  
reaction of the ignition device (4).

3.

A method according to claim 1 or 2,

30 c h a r a c t e r i z e d i n that the ignition device (4)  
may be propelled at a moderate speed through the guidance  
tube (6), that it may optionally be stopped during its  
passage through the tube (6), and that it may optionally be  
reversed and returned back into the guidance tube (6) without  
35 a reaction taking place.

4.

An apparatus to be used for igniting combustible gases (1) for example from a flare (2) of a flare tower (3), by means of an ignition device (4) which is brought toward a region in or near a cloud of gas (1), comprising a guidance tube (6) and a supply of a pressure medium, where the ignition device (4) is adapted for propulsion through the guidance tube (6) by means of the pressure medium for the purpose of bringing the ignition device (4) close to the cloud of gas (1) for reaction near or within the cloud of gas (1), said device further comprising a feeding unit (7), a control device (14) and, optionally, a magazine (8) for the ignition device (4), characterized in that an ignition initiator (13) is mounted somewhere along the guidance tube (6), said initiator (13) activating the ignition device (4) which, after a time delay, undergoes a reaction outside the tube, in or near the cloud of gas (1).

5.

An apparatus according to claim 4, characterized in that it comprises a trapping device (20) for the ignition device (4), which trapping device (20) is situated outside the tube, whereby the ignition device (4) is positioned within the trapping device (20) prior to the reaction of the ignition device (4).

6.

An ignition device to be used with the apparatus according to claims 4 or 5, characterized in that the ignition device is in the form of an ignition pellet (4) which is electrically or mechanically activated, said activation occurring somewhere along its path in the tube (6), possibly at the moment when the ignition pellet (4) leaves the tube (6), possibly when the ignition pellet (4) starts its course through the tube (6), said ignition pellet (4) having a built-in delay prior to its reaction, and the time for its

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activation and delay being predetermined and adapted to the particular flare and application.

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